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REMARKS

Claims 1-8, 10-15 and 20-23 are pending in the application.

Claims 20-23 are added herein. Claim 20 recites a biosensor comprising "a support substrate having first and second ends, electrodes positioned on the support substrate, the electrodes cooperating with one another to define electrode arrays situated adjacent to the first end, a spacer substrate positioned on the support substrate, the spacer substrate having first, second, and third members, and a cover positioned on the spacer substrate, the cover cooperating with support substrate to define a channel, the channel extending between the three members and including an inlet positioned between the second and third members adjacent to the first end of the support substrate and spaced-apart first and second opposite ends, the first opposite end being positioned between the first and second members and the second opposite end being positioned between the first and third members, each electrode array being positioned in the channel adjacent to one of the opposite ends". Support for the new claim is found in the specification as filed and particularly at page 6 lines 1-11 and Figures 1-4. No new matter is added by virtue of the new claim.

Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Bhullar et al. (USPN 6,540,890). Bhullar et al. disclose a biosensor that comprises a substrate, a reagent positioned on the substrate, and a cover with at least one channel carved therein. (Column 2 lines 8-10) Claim 9 has been cancelled without prejudice or disclaimer of the subject matter claimed therein. Claim 10 has been amended to depend from claim 8.

The Advisory Action states that Bhullar discloses "spacers (40 and 48) . . . attached to the cover . . . which define a channel (62). . . ". That proffer is respectfully traversed as the specification of Bhullar et al. discloses at Column 2 line 33 that "Cover 12 of biosensor 10 includes a *first surface 48 facing substrate*" (*emphasis added*). The surface 48 of the cover 12 is simply not a spacer. Bhullar et al. further teaches that "a flow channel 62 is carved in *first surface 48 of cover 12*. . . Channel 62 includes . . . *opposite walls 40*. . . See, Figure 2". (Column 2 lines 50-59, *emphasis added*). Likewise, walls 40 of a channel carved into the cover 12 cannot be said to be a spacer. As such, it is submitted

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that Bhullar et al. fails to disclose or suggest the existence of a spacer substrate, let alone a spacer substrate having members as recited in claims 1 and 8.

The Advisory Action further states that Bhullar et al. discloses that the channel has "opposing first and second ends and an inlet positioned between the ends". That proffer is respectfully traversed. The Examiner's attention is directed to Column 8, lines 26-33, where Bhullar et al. teaches that "a user of biosensor 10 places a finger on concave ends 60, 76. Capillary forces pull a liquid sample from ends 60,76 through first portion 72 of channel 62. . . Thus, the liquid sample passes through the converging first portion 72 and encounters second portion 74 of channel 62 and reagent 20." As such, the inlet of the channel 62 of Bhullar et al. is positioned at one of its opposite ends. There is no disclosure or suggestion in Bhullar et al. of its inlet of its flow channel 62 being positioned between its ends.

In contrast to Bhullar et al., claim 1 recites a biosensor comprising "an inlet adjacent to the first end of the support substrate, and spaced-apart opposite ends". In light of the above, and the structure illustrated in Figure 2, the channel 62 of Bhullar et al. fails to meet this limitation. Further, claim 8 recites a biosensor comprising a channel "having opposing first and second ends and an inlet positioned between the ends". With the inlet of the channel 62 being located at one of its opposite ends, it is submitted that the channel 62 of Bhullar et al. fails to meet this limitation as well. As such, Bhullar et al. fails to disclose or suggest the existence of a channel as recited in claims 1 and 8.

The Advisory Action further states that Bhullar et al. discloses "an inlet positioned . . . between the first and second electrode sets (col. 2, lines 50-67)". That proffer is also respectfully traversed. It is acknowledged that Bhullar et al. discloses at Column 4 lines 65-66 that "a number of arrays may be formed". It is submitted, however, that there is no disclosure or suggestion in Bhullar et al. as to the location of an array other than in the flow channel 62. As stated above and as illustrated in Figure 2 of Bhullar et al., the inlet to the channel 62 is located at one of the channel's opposite ends.

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In contrast to Bhullar et al., claim 1 recites a biosensor comprising "an inlet adjacent to the first end of the support substrate, and opposite ends, each electrode array being positioned in the channel adjacent to one of the opposite ends". In light of the above, and the structure illustrated in Figure 2, the channel 62 of Bhullar et al. fails to meet this limitation. Further, claim 8 recites a biosensor comprising a channel "having opposing first and second ends and an inlet positioned between the ends and between the first and second electrode sets". With the inlet of the channel 62 being located at one of its opposite ends, it is submitted that the channel 62 of Bhullar et al. fails to meet this limitation as well. As such, Bhullar et al. fails to disclose or suggest the existence of arrays positioned in a channel as recited in claim 1 or the existence of electrode sets positioned in a channel as recited in 8.

It is further submitted that Bhullar et al. teach away from the biosensor of claims 1 and 8. Referring specifically to claim 1, it is noted that the claim recites "a cover positioned on the spacer substrate". Bhullar et al. not only fail to disclose a spacer substrate, but Bhullar et al. exclusively disclose a cover (12) that is coupled to the substrate (14). The cover (12) is coupled to that substrate (14), for example by an adhesive. (Column 2 lines 43-49 and Figures 1, 3, 5, 6, 8, and 9).

Referring again to both claims 1 and 8, each recite a "channel extending between members of the spacer substrate". Bhullar et al. not only fail to disclose a spacer substrate, but Bhullar et al. exclusively disclose that flow channel (62) is carved in a first surface (48) of the cover (12). (Column 2 lines 50-54). It is noted that the purpose of the channel is to provide precise fluidic channels for disposable test with high dimensional precision. (Column 2 lines 8-14). Bhullar et al. fail to provide any teaching or suggestion that would lead one away from this carved cover design.

It is submitted that the teaching or suggestions, as well as the expectation of success, must come from the prior art and not applicants' disclosure. With that in mind, it becomes apparent that Bhullar et al. fail to disclose or suggest a biosensor that comprises "a support substrate having first and second ends, electrodes positioned on the support

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substrate, . . . a spacer substrate positioned on the support substrate, the spacer substrate having members, and a cover positioned on the spacer substrate, the cover cooperating with the support substrate to define a channel, the channel extending between members of the spacer substrate and including an inlet adjacent to the first end of the support substrate, and opposite ends, each electrode array being positioned in the channel adjacent to one of the opposite ends", as required by claim 1.


It is further apparent in light of the above, that Bhullar et al. fail to disclose or suggest a biosensor comprising "a support substrate, a first electrode set positioned on the support substrate, a second electrode set positioned on the support substrate, the first and second electrode sets being spaced-apart from one another, a spacer substrate positioned on the support substrate, the spacer substrate having members, and a cover extending across the first and second electrode sets, the cover cooperating with the support substrate to define a generally linear capillary channel extending between members of the spacer substrate, the channel having opposing first and second ends and an inlet positioned between the ends and between the first and second electrode sets", as recited by claim 8.

Accordingly, claims 1 and 8 are not anticipated and are believed to be patentable over Bhullar et al. Claims 2-7 depend from claim 1 and claims 10-15 depend from claim 8. Reconsideration of the rejection in light of the amendments, leading to withdrawal of the rejection and allowance of the claims is respectfully requested.

The claims as submitted herein are believed to be in condition for allowance, and allowance of the application is respectfully requested. In addition, it is requested that this paper be considered a request for extension of time sufficient to effect a timely response and that that all fees due be charged to Deposit Account Number 02-2958 with reference to (RDID 0090 US).

Respectfully submitted,

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